```
In [*]:
        # To replicate a Banking system
        from random import randint
        class BankingSystem:
                def __init__(self):
                    self.card_numbers = []
                    self.pin numbers = []
                    self.iin = 400000
                     self.balance = 0
                     print("Hello!!! Welcome to the Banking System")
                def main_welcom_screen(self):
                         print(
                             "1. Create an account\n"
                             "2. Log into account\n"
                             "0. Exit")
                         main_menu_selection = str(input())
                         if main_menu_selection == "1":
                             self.create_account()
                         if main_menu_selection == "2":
                             self.account_login()
                         if main_menu_selection == "0":
                             print("\n")
                             return "Bye!"
                def create account(self):
                     credit card number = "400000" + format(randint(0000000000, 999999999
                     pin number = format(randint(0000, 9999), '04d')
                     self.card_numbers.append(credit_card_number)
                     self.pin numbers.append(pin number)
                     print("\n")
                    print("Your card has been created")
                    print("Your card number:")
                     print(credit_card_number)
                     print("Your pin number:")
                    print(pin_number)
                    print("\n")
                    self.main welcom screen()
                def account_login(self):
                     print("\n")
                     print("Enter your card number:")
                     entered_card_number = int(input())
                     print("Enter your PIN:")
                    entered_pin_number = int(input())
                    if str(entered card number) in self.card numbers and str(entered pi
                         print("\n")
                         print("You have successfully logged in!")
                         self.account()
                     else:
                         print("\n")
                         print("Wrong card number of PIN!")
```

```
print("\n")
                self.main_welcom_screen()
        def account(self):
            print("\n1.Deposit \n2.Withdrawal \n3.Balance \n4.Log out\n")
            account_selection = str(input())
            if account_selection == "1":
                amount=float(input("Enter amount to be Deposited: "))
                self.balance += amount
                print("\n Amount Deposited:",amount)
                self.account()
            elif account_selection == "2":
                amount = float(input("Enter amount to be Withdrawn: "))
                if self.balance>=amount:
                    self.balance-=amount
                    print("\n You Withdrew:", amount)
                else:
                    print("\n Insufficient balance ")
                self.account()
            elif account_selection == "3":
                print("\n Net Available Balance=",self.balance)
                self.account()
            elif account selection == "4":
                print("\n")
                print("You have successfully logged out!")
                print("\n")
                self.main_welcom_screen()
print(BankingSystem().main_welcom_screen())
```

```
Hello!!! Welcome to the Banking System
1. Create an account
2. Log into account
0. Exit
1
Your card has been created
Your card number:
4000009949498450
Your pin number:
8306
1. Create an account
2. Log into account
0. Exit
2
Enter your card number:
4000009949498450
Enter your PIN:
8306
You have successfully logged in!
1.Deposit
2.Withdrawal
3.Balance
4.Log out
Enter amount to be Deposited: 4000
 Amount Deposited: 4000.0
1.Deposit
2.Withdrawal
3.Balance
4.Log out
Enter amount to be Withdrawn: 2000
 You Withdrew: 2000.0
1.Deposit
2.Withdrawal
3.Balance
4.Log out
3
```

Net Available Balance= 2000.0

localhost:8888/notebooks/miniproject2.ipynb

- 1.Deposit
- 2.Withdrawal
- 3.Balance
- 4.Log out

2

Enter amount to be Withdrawn: 4500

Insufficient balance

- 1.Deposit
- 2.Withdrawal
- 3.Balance
- 4.Log out

4

You have successfully logged out!

- 1. Create an account
- 2. Log into account
- 0. Exit